Check List 8(4): 752–753, 2012
© 2012 Check List and Authors
ISSN 1809-127X (available at *www.checklist.org.br*)

Check List
Journal of species lists and distribution

NOTES ON GEOGRAPHIC DISTRIBUTION

First record of *Paratriacanthodes retrospinis* Fowler, 1934 (Tetraodontiformes: Triacanthodidae) from India

Thayyil K. Sirajudheen and Appukuttannair Bijukumar*

1 University of Kerala, Department of Aquatic Biology & Fisheries, Kariavattom Campus, 695581, Thiruvananthapuram, Kerala, India
* Corresponding author. E-mail: *abiju@rediffmail.com*

ABSTRACT: The Sawspine spikefish, *Paratriacanthodes retrospinis* Fowler, 1934, is reported from Indian waters for the first time, based on specimens collected from Sakthikulangara fishing harbor (08°30' N, 76°53.3' E), Kerala, southwest coast of India. Morphometric and meristic characters of the two specimens obtained correspond with those of *P. retrospinis* published previously.

Spikefishes (Tetraodontiformes: Triacanthodidae) inhabit waters below 50 meters and are distributed in the Atlantic, Indian, and western and central Pacific oceans (Tyler 1968; Matsura and Tyler 1998). Of the 23 species of spikefishes recorded, only two species, namely *Macrorhamphosodes platycheilus* Fowler, 1934 and *Triacanthodes ethiops* Alcock, 1894 have been recorded from the coasts of India (Kapoor *et al.* 2002; Froese and Pauly 2011). *Paratriacanthodes* Fowler, 1934 is one of the morphologically generalized genera of Triacanthodidae (Tyler 1980) and is mainly characterized by the presence of a pair of large ventral fin spines that can be erected ventro-laterally and locked in this position (Tyler 1962). *Paratriacanthodes* is represented by three species namely *P. abei* Tyler, 1997, *P. herrei* Myers, 1934, and *Paratriacanthodes retrospinis* Fowler, 1934 (Froese and Pauly 2011). This paper records *P. retrospinis* Fowler, 1934 for the first time from the Indian coast.

Two specimens were trawled off Kerala (08°30' N, 76°53.3' E), southwest coast of India at a depth of about 50 meters: ZSI/WGRC/IR/V 2083 (Western Ghats Regional Station of Zoological Survey of India, Calicut, Kerala, India), 34.8 mm SL, collected on 23 December 2009; AQB F S469 (Museum of Department of Aquatic Biology and Fisheries, University of Kerala, India), 36.5 mm SL, collected on 28 March 2011. Morphometric and meristic data were gathered following methods described by Strauss and Bond (1990).

The mainly diagnostic features are: dorsal fin VI+14-15; anal fin 13-14; pectoral fin 13; pelvic fin I+1. Body strongly compressed. Head small, conic, its length and width almost equal. Eyes large, 34% of head length, inter-orbital space concave and narrow. Mouth terminal with protrusible lower jaw and small conical teeth. Gill opening a small vertical slit in front of pectoral fin, not reaching lower margin of pectoral-fin base. Scales with rugged upright spinules in horizontal series on body and transverse series on lower half of head. Two dorsal fins; spinous first dorsal inserted over gill opening. Second dorsal and anal fins soft, without spines. First dorsal spine and pelvic spine with three rows of large antrorse spiny processes along their lengths, and hence the name *retrospinis* (Fowler 1934). Pelvic spine longer than first dorsal spine. Pale pink in color, with three lightly colored lines from lower jaw to anus, which disappears on preservation. Morphometric and meristic data are given in Table 1. The type specimen was described from the South China Sea by Fowler (1934) and reported subsequently from various countries bordering Indo-Pacific, including Hong Kong, Taiwan and Japan (Masuda *et al.* 1984), China, South Africa and Mozambique (Tyler 1986), New Caledonia (Matsuura and Tyler 1997) and Australia (Hutchins 2003). The record of this specimen from the southwest coast of India shows more extensive distribution of *P. retrospinis* in the Indian Ocean.

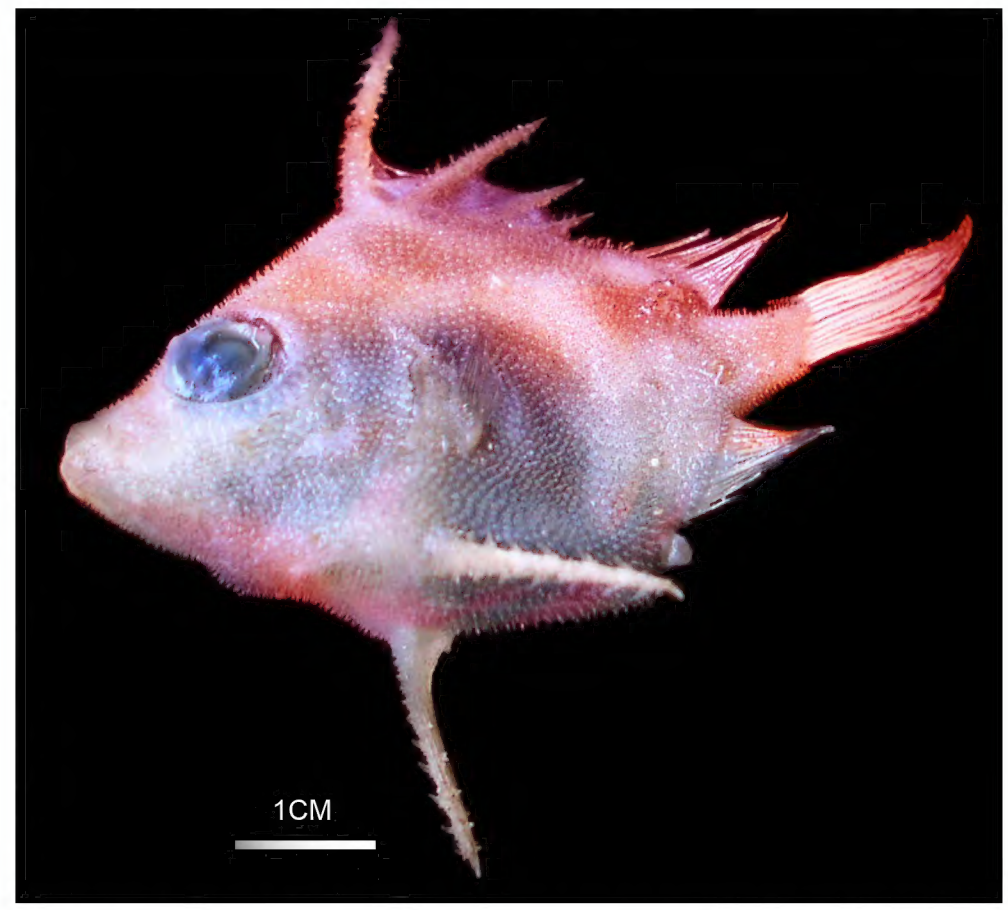

FIGURE 1. *Paratriacanthodes retrospinis* (ZSI/WGRC/IR/V/2083), 34.8 mm SL, collected from Sakthikulangara fishing harbour, Kerala, India.

Table 1. Measurements and counts of *Paratriacanthodes retrospinis* collected from Kerala, India.

CHARACTERS	ZSI/WGRC/IR/V/2083	AQB F S469	FOWLER (1934)
Total length, TL (mm)	45	46.5	114
Standard length, SL (mm)	34.8	36.5	-
Weight (g)	2.5	2.5	-
Measurements in % SL			
Body depth	64.66	65.75	-
Head length	46.26	46.58	-
Head depth	43.10	44.66	-
Post-orbital length	14.94	17.53	-
Eye diameter	15.80	15.89	-
Pre-orbital length	12.64	17.26	-
Pre-dorsal length	52.01	55.34	-
Pre-pectoral length	47.41	48.22	-
Pre-pelvic length	51.72	57.53	-
Pre-anal length	80.17	80.82	-
Caudal peduncle length	9.77	12.88	-
Caudal peduncle depth	9.20	9.59	-
Dorsal-fin length	54.60	52.60	-
Anal-fin length	12.93	14.79	-
Pectoral-fin length	17.53	17.26	-
Pelvic-fin length	34.20	38.90	-
Caudal-fin length	28.74	27.95	-
First dorsal-fin spine length	33.05	31.51	-
Pelvic-fin spine length	37.07	38.90	-
Maxilla length	6.32	6.58	-
Mandible length	3.74	4.93	-
Counts			
Dorsal-fin spines	5	5	5
Dorsal-fin rays	14	15	15
Pectoral-fin rays	13	13	-
Anal-fin rays	13	14	13
Pelvic-fin spines	1	1	-
Pelvic-fin rays	1	1	-

Acknowledgments: The authors thank Kerala State Council for Science Technology and Environment for the financial support for the current study.

Literature Cited

Fowler, H.W. 1934. Descriptions of new fishes obtained 1907 to 1910, chiefly in the Philippine Islands and adjacent seas. *Proceedings of the Academy of Natural Sciences of Philadelphia* 85: 233-367.

Froese, R. and D. Pauly. 2011. *FishBase*. *Version 2010.* Electronic Database accessible at http://www.fishbase.org. Captured on 13 August 2011.

Hutchins, J.B. 2003. Fishes checklist for Western Australia. http://www.museum.wa.gov.au. Captured on 07 November 2003.

Kapoor, D., R. Dayal and A.G. Ponniah. 2002. *Fish Biodiversity of India*. Lucknow: National Bureau of Fish Genetic Resources, 775 p.

Masuda, H., K. Amaoka, C. Araga, T. Uyeno and T. Yoshino. 1984. The Fishes of the Japanese Archipelago. Vol. 1. Tokyo: Tokai University Press, 437 p.

Matsura, K. and J.C. Tyler. 1997. Tetraodontiform fishes, mostly from deep waters, of New Caledonia; p. 173-208. *In* B. Séret (ed.). Résultats des Campagnes MUSORSTOM, Vol. 17. *Memoirs du Museum National d'Histoire Naturelle* 174: 1-213.

Matsura, K. and J.C. Tyler. 1998. Triacanthodidae; p. 227-228. *In* J.R. Paxton and W.N. Eschmeyer (ed.). *Encyclopedia of Fishes*. San Diego: Academic Press.

Strauss, R.E. and C.E. Bond. 1990. Taxonomic methods: morphology; p. 109–140. *In* P. Moyle and C. Schreck (ed.). *Methods for Fish Biology*. Bethesda: American Fisheries Society, Special Publication.

Tyler, J.C. 1962. The pelvis and pelvic fin of plectognath fishes: a study in reduction. *Proceedings of the Academy of Natural Sciences of Philadelphia* 114: 207-250.

Tyler, J.C. 1968. *A monograph on plectognath fishes of the superfamily Triacanthoidea*. Academy of Natural Sciences of Phildelphia16: 364 p.

Tyler, J.C. 1980. Osteology, phylogeny, and higher classification of the fishes of the order Plectognathi (Tetraodontiformes). National Oceanic and Atmospheric Administration, Technical Report. *National Marine Fisheries Service, Circular* 434: 422 p.

Tyler, J.C. 1986 Triacanthodidae; p. 887-890. *In* M.M. Smith and P.C. Heemstra (ed.) Smiths' Sea Fishes. Berlin: Springer-Verlag.

Received: September 2011
Accepted: May 2012
Published online: August 2012
Editorial responsibility: Michael Maia Mincarone